WHAT IS CLAIMED IS:

1. A method of generating a living biological matrix *in vitro*, the method comprising:

(a) obtaining a cell sample;

(b) disrupting the cell sample to create a mixture containing cells and cellular debris;

(c) culturing the mixture, retaining the cellular debris, in culture medium for a time and under conditions sufficient to form a living biological matrix *in vitro*; and

(d) removing the biological matrix from the culturing medium.

2. The method of claim 1, wherein the cell sample of step (a) is obtained from a subject who will be a recipient of the biological matrix.

3. The method of claim 1, wherein the cell sample of step (a) is obtained from a human.

4. The method of claim 1, wherein the cell sample comprises a bodily fluid.

5. The method of claim 4, wherein the bodily fluid is blood.

6. The method of claim 4, wherein the bodily fluid is cerebrospinal fluid.

7. The method of claim 1, wherein the cell sample comprises a portion of an organ.

8. The method of claim 1, wherein the cell sample comprises auricular cartilage.

9. The method of claim 8, wherein before disrupting the cell sample, the perichondrium is removed from the cartilage.

10. The method of claim 1, further comprising adding to the mixture a component that adds shape, structure, or support to the matrix.

11. The method of claim 10, wherein the component is a hydrogel or an adhesive.

12. The method of claim 1, further comprising adding to the matrix an antibiotic.

13. A method of augmenting a tissue defect in a subject, the method comprising:

(a) preparing a living biological matrix using the method of claim 1; and

(b) administering the living biological matrix to the subject in the region of the tissue defect, wherein the matrix develops a characteristic of the endogenous tissue and thereby augments the tissue defect.

14. The method of claim 13, wherein the tissue defect is in a muscle.

15. The method of claim 14, wherein the muscle is the heart.

16. The method of claim 13, wherein the tissue defect is in a portion of a lung, pancreas, spinal cord, joint, head, neck, skin, kidney, or liver of the subject.

17. The method of claim 13, wherein the subject is a human.

18. A living biological matrix comprising a spore-like cell, cell fragments, lipids, and polysaccharides.

19. The matrix of claim 18, further comprising a component that adds shape, structure, or support to the matrix.

20. The matrix of claim 18, further comprising a hydrogel or adhesive.

21. The matrix of claim 18, further comprising an antibiotic.

22. The matrix of claim 18, further comprising a cellular component selected from the group consisting of a fibronectin, laminin, collagen, glycoprotein, thrombospondin,

elastin, fibrillin, mucopolysaccharide, glycolipid, heparin sulfate, chondroitin sulfate, keratin sulfate, glycosaminoglycan, and hyaluronic acid.

23. A method of augmenting a tissue defect in a subject, the method comprising:

(a) obtaining a living biological matrix of claim 18; and

(b) administering the living biological matrix to the subject in the region of the tissue defect, wherein the matrix develops a characteristic of the endogenous tissue and thereby augments the tissue defect.

24. A living biological matrix produced by a process comprising:

(a) obtaining a cell sample;

(b) disrupting the cell sample to create a mixture containing cells and cellular debris;

(c) culturing the mixture, retaining the cellular debris, in culture medium for a time and under conditions sufficient to form a biological matrix *in vitro*; and

(d) removing the biological matrix from the culture medium.

25. The matrix of claim 24, wherein the cell sample of step (a) is obtained from a subject who will be a recipient of the biological matrix.

26. The matrix of claim 24, wherein the cell sample is obtained from a human.

27. The matrix of claim 24, wherein the cell sample comprises a bodily fluid.

28. The matrix of claim 27, wherein the bodily fluid is blood.

29. The matrix of claim 27, wherein the bodily fluid is cerebrospinal fluid.

30. The matrix of claim 24, wherein the cell sample comprises a part of an organ.

31. The matrix of claim 24, wherein the cell sample comprises auricular cartilage.

32. The matrix of claim 31, wherein, before disrupting the cell sample, the perichondrium is removed from the cartilage.

33. The matrix of claim 24, wherein the process further comprising adding to the mixture a component that adds shape, structure, or support to the matrix.